Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (previously amended) An apparatus for measuring the weight of material being processed or moved by a material moving apparatus driven by an electrical motor, the apparatus comprising a means for measuring the electrical energy consumed by the motor driving the material moving apparatus during operation of the material moving apparatus and a calibration formula for converting the power consumption of the motor to tonnage per hour of raw material being processed by the apparatus, the calibration formula being derived from an average of "no-load" readings plus up to 2.0 standard deviations, wherein a continual record is kept of all "No-load" and "start-up load" time during the recording process and these figures are totalized along with tonnage for the recording period.

2. (original) An apparatus according to claim 1 wherein the material moving apparatus is a conveyor, apron conveyor or bucket elevator.

3. (original) An apparatus according to claim 2 wherein the apparatus is provided with a temperature sensor to monitor the ambient temperature and apply a temperature calibration factor to adjust the output of the apparatus based upon the ambient temperature.

4. (original) An apparatus according to claim 3 wherein the apparatus is provided with a belt speed sensor to monitor the speed of the belt and adjust the output should stalling or slippage of the belt occur.

5. (cancelled)

6. (currently amended) A method ~~according to claim 5~~ for measuring the weight of material being processed or moved by a material moving apparatus driven by an

electrical motor, the method comprising measuring the electrical energy consumed by the motor driving the material moving apparatus during operation of the apparatus and utilizing a calibration formula to convert the amount of electrical energy consumed by the motor to tonnage per hour of raw material processed by the material moving apparatus, the calibration formula being derived from an average of "no-load" readings plus up to 2.0 standard deviations, wherein a continual record is kept of all "No-load" and "start-up load" time during the recording process and these figures are totalized along with tonnage for the recording period.

7. (original) A method according to claim 6 wherein the material moving apparatus is a conveyor, apron conveyor or bucket elevator.

8. (original) A method according to claim 7 wherein the apparatus is provided with a temperature sensor to monitor the ambient temperature and the method involves the further step of applying a temperature calibration factor to adjust the output of the apparatus based upon the ambient temperature.

9. (original) A method according to claim 8 wherein the apparatus is provided with a belt speed sensor to monitor the speed of the belt and the method involves the further step of adjusting the output of the apparatus should stalling or slippage of the belt occur.

10. (original) A method according to claim 9 wherein the apparatus is provided with a digital inclinometer to monitor changes in angle on stacker conveyors to adjust the conversion of kilowatts to tonnage by using a factor from the tilt sensor showing any changes in angle as the conveyor moves up or down.

11. (original) A method according to claim 10 wherein a No-load test provides a new No-Load figure which is compared to the original No-Load figure and any difference is added or subtracted from the original and this difference is applied to the regression formula to filter out mechanical changes that may develop from normal operating conditions of a conveyor, apron conveyor or bucket elevator.

12. (previously presented) A method according to claim 6 wherein the "start-up load" is set at a level just above a normal full production load reading which filters out large

peaks occurring when an apparatus is started under full load, while recording a kilowatt reading during start up insuring all readings are used in the conversion process.

13. (previously presented) A method according to claim 11 wherein material tests carried out after initial calibration are conducted after a no-load test to insure that the new material test figure is calculated and adjusted to the difference in new no-load reading compared to the original test at a base no-load figure to insure all data is related back to the original test.

14. (previously presented) A method according to claim 13 wherein the No-load reading is calculated using the average idle kilowatt reading plus between 1.0 and 2.0 standard deviations depending on the slope of the regression line to insure all readings below the no-load, idle operating level are filtered out of the kilowatt conversion to tonnage to increase precision of readings.

15. (previously presented) A method according to claim 12 wherein the material moving apparatus includes a crusher operated by an electrical crusher motor and the kilowatt hour of power consumption of the crusher motor while the crusher is crushing rock is also measured and applied to a calibration formula to provide a measurement of tonnes of rock crushed per kilowatt hour of energy consumed to compare drilling and blasting results

16. (previously presented) A method according to claim 15 wherein the material moving apparatus includes one or more screening apparatus to sieve the material according to particle size feeding a plurality of conveyors, the weight of material moved by each conveyor to a stockpile being measured to provide a sieve analysis of rock fragmentation produced by quarry blasting in real time.

17. (previously presented) A method according to claim 16 wherein tonnes of rock crushed per kilowatt hour are combined with the tonnes of rock measured by the material moving apparatus going into final stockpiles and used as a sieve analysis of rock fragmentation produced by quarry blasting to compare drilling and blasting results in real time.